

W



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/820,588

04/08/2004

Floyd A. Edwards

M-649

8122

30757 7590 08/21/2007

BANNER & WITCOFF, LTD
ATTORNEYS FOR CLIENT NO. 006780
10 SOUTH WACKER DR.
SUITE 3000
CHICAGO, IL 60606

EXAMINER

ZUBAJLO, JENNIFER L

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

08/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/820,588	Applicant(s) EDWARDS, FLOYD A.	
	Examiner Jennifer Zubajlo	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/3/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "a liquid crystal display included on the printing device/barcode label printer", "a processor located on the printing device/barcode label printer", and "a keyboard mounted on the printing device/barcode label printer" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 1 is objected to because of the following informalities: "the processor" in lines 8-9 of claim 1 should have been "the keyboard". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-8 and 10-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification as originally filed has failed to disclose applicant's newly claimed inventions "a processor located on the printing device/barcode label printer" [claims 1, 6, 10]. Claim 13 does not have support in the specification for the limitation "varying the first contrast setting to create a second contrast setting for the liquid crystal display based on the resistance of the potentiometer". Claim 17 does not have support

in the specification for the limitation "the step of varying the first contrast setting to create a second contrast setting is received during a data entry mode of the barcode label printer.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-8 & 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art in view of David G. Burnett (Patent Number: US 4,964,124), hereinafter Burnett.

As to claim 1, Applicant's Admitted Prior Art teaches: A keyboard and display assembly comprising: a liquid crystal display capable of displaying information on a plurality of lines; a processor controlling the information depicted on the display; and a keyboard having a plurality of data entry keys coupled to the processor and at least one contrast key for controlling the contrast of the liquid crystal display (see [0004]).

Applicant's Admitted Prior Art does not teach a keyboard and display assembly of a printing device, a potentiometer or the contrast key being directly coupled to the liquid crystal display by the potentiometer bypassing the processor.

Burnett teaches the contrast key being directly coupled to the liquid crystal display by a potentiometer bypassing the processor (see figure 2 & 3B – elements 62 & 64).

None of the references directly teach a keyboard and display assembly of a printing device. Examiner is taking Official Notice. It is well known in the art to have a keyboard and display assembly for use on a printing device.

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to have been motivated to incorporate a liquid crystal display capable of displaying information on a plurality of lines; a processor controlling the information depicted on the display; and a keyboard having a plurality of data entry keys coupled to the processor and at least one contrast key for controlling the contrast of the liquid crystal display taught by Applicant's Admitted Prior Art with the contrast key being directly coupled to the liquid crystal display by a potentiometer bypassing the processor taught by Burnett because this enables the user to adjust the contrast without having to exit data entry mode and enter set-up mode.

As to claim 3, none of these references directly teach a first contrast key for increasing the liquid crystal display's contrast and a second contrast key for decreasing the liquid crystal display's contrast, however, the number of keys used for adjusting the contrast is just an engineering choice of design.

Art Unit: 2629

As to claim 4, Burnett teaches the potentiometer changing its resistance in response to the contrast key being actuated (see figure 3B).

As to claim 5, Burnett teaches the potentiometer includes a digital potentiometer, the digital potentiometer directly coupling the contrast key to the liquid crystal display, the digital potentiometer changing its resistance in response to the contrast key being pressed (see figure 3B). None of the references directly teach a digital potentiometer, however it would be obvious to use digital instead of analog.

As to claim 6, Applicant's Admitted Prior Art teaches a keyboard and display assembly comprising: a liquid crystal display capable of displaying information on a plurality of lines; a processor controlling the information depicted on the liquid crystal display; a keyboard having a plurality of keys coupled to the processor (see [0004]).

Applicant's Admitted Prior Art does not teach a keyboard and display assembly mounted on a printer or at least one contrast control key coupled to the liquid crystal display by a potentiometer such that the coupling of the contrast control key bypasses the processor.

Burnett teaches at least one contrast control key coupled to the liquid crystal display by a potentiometer such that the coupling of the contrast control key bypasses the processor (see figure 2 and 3B – elements 62 & 64).

None of the references directly teach a keyboard and display assembly mounted on a printer. Examiner is taking Official Notice. It is well known in the art to have a keyboard and display assembly for use on a printing device.

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to have been motivated to incorporate a keyboard and display assembly comprising: a liquid crystal display capable of displaying information on a plurality of lines; a processor controlling the information depicted on the liquid crystal display; a keyboard having a plurality of keys coupled to the processor taught by Applicant's Admitted Prior Art with at least one contrast control key coupled to the liquid crystal display by a potentiometer such that the coupling of the contrast control key

bypasses the processor taught by Burnett because this enables the user to adjust the contrast without having to exit data entry mode and enter set-up mode.

As to claim 8, Burnett teaches the potentiometer is a digital potentiometer that changes its resistance in response to the contrast key being pressed (see figure 3B). None of the references directly teach a digital potentiometer, however it would be obvious to use digital instead of analog.

As to claim 10, Applicant's Admitted Prior Art teaches: A keyboard and display assembly comprising: a liquid crystal display capable of displaying information on at least five lines; a processor controlling the information depicted on the liquid crystal display; and a keyboard having a plurality of keys coupled to the processor (see [0004]).

Applicant's Admitted Prior Art does not teach a first contrast control key coupled to the liquid crystal display by a potentiometer to increase the display's contrast and a second contrast control key coupled to the liquid crystal display by the potentiometer to decrease the display's contrast, wherein the first and second contrast control keys are coupled to the liquid crystal display bypassing the processor.

Burnett teaches contrast control coupled to the liquid crystal display bypassing the processor (see figures 2 & 3B – elements 62 & 64).

None of the references directly teach the liquid crystal display capable of displaying information on at least five lines, however this is simply an engineering

choice of design and Applicant's Admitted Prior Art teaches a multi-line liquid crystal display (see [0004]).

None of the references directly teach a first contrast key for increasing the liquid crystal display's contrast and a second contrast key for decreasing the liquid crystal display's contrast, however, the number of keys used for adjusting the contrast is just an engineering choice of design.

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to have been motivated to incorporate A keyboard and display assembly comprising: a liquid crystal display capable of displaying information on at least five lines; a processor controlling the information depicted on the liquid crystal display; and a keyboard having a plurality of keys coupled to the processor taught by Applicant's Admitted Prior Art with the contrast control coupled to the liquid crystal display bypassing the processor taught by Burnett because this enables the user to adjust the contrast without having to exit data entry mode and enter set-up mode.

As to claims 2, 7, and 11, Applicant's Admitted Prior Art teaches a multi-line liquid crystal display (see [0004]).

Applicant's Admitted Prior Art does not specifically disclose that a liquid crystal display is capable of displaying information on five or seven lines. However, it would have been obvious for Applicant Admitted Prior Art multi-line display to be capable of displaying information on at least five or seven lines depending on the display size. It

would have also been an engineering choice of design depending upon individual choice of how many lines to leave on the display.

As to claim 12, none of the references directly teach the potentiometer is a digital potentiometer, however it would be obvious to use digital instead of analog. Also, none of the references directly teach a first and second contrast key, however the number of keys used for adjusting the contrast is just an engineering choice of design.

Response to Arguments

1. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2629

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Zubajlo whose telephone number is (571) 270-1551. The examiner can normally be reached on Monday-Friday, 8 am - 5 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on (571) 272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JZ
8/9/07


AMARE MENGISTU
SUPERVISORY PATENT EXAMINER